

URBAN AEROSOLS CHARACTERIZATION IN NEWARK NJ

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Newark is the largest city in New Jersey, and it represents a unique metropolitan area that is heavily influenced by extensive industries, large population, massive transit, main airport, and port facilities. To characterize urban particulate air pollution in such environment, air particulate sampling was conducted in Newark during the month of July 2006. A PM_{2.5} low-volume air sampler was used for sample collection that took place on the roof of a 23 m building at Rutgers University Newark campus located in the heart of Newark. Samples were taken at different diurnal times. An inductively coupled plasma mass spectrometer (ICPMS) was used to determine the concentrations of selected trace elements associated with air particulate matter. Ion chromatography (IC) was used to determine concentrations of the selected ions in air samples. This presentation will focus on the discussions of the ambient levels of selected air particulate pollutants over Newark and their possible sources.